The relationship between teaching and research in UK universities - what is it and does it matter?

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Executive Summary

This paper considers the different perspectives taken by universities, students, and government towards the relationship between teaching and research in UK undergraduate higher education.

The context is the diversity of the sector: some universities define themselves by their research activity; others focus entirely or mainly on teaching; and many do both. Research-informed teaching is often invoked, with research reputation being a powerful driver of student choice.

Where universities do both teaching and research, there is substantial variation in the extent to which students are exposed to research activities. In practice, financial and policy pressures on universities are leading to teaching and research activities becoming increasingly separated.

There is extensive academic literature looking at the relationship between teaching and research, mainly from the perspective of pedagogy and disciplinary practice. Academic papers describe different forms of research-informed teaching, for instance students being taught by researchers, students working on research projects alongside researchers, research informing the curriculum and inquiry-based learning. It is now largely accepted that there is no automatic correlation between good teaching and good research. However, many academic papers evidence the ways in which research-informed teaching can have a substantial and positive impact on students’ learning experience. Students also generally report positively on being exposed to research activity, particularly if they are interested in postgraduate study. Some
research also points to the negatives, for example where research activity diverts academics from their teaching.

In contrast to the diversity and nuance inherent in the university sector’s approach, governments of all political persuasions, particularly at Westminster, have been consistently sceptical about the value of the relationship. They have instead prioritised other objectives, such as expansion of student numbers, research concentration or separate accountability for teaching and research, all of which have directly or indirectly driven research and teaching activities apart. Recently, governments have been concerned that the relationship obscures a focus on transparency and quality, particularly of teaching. Indeed, this was one of the reasons for the introduction in England of separate regulatory and funding regimes in the Higher Education and Research Act, 2017 (HERA). This separation has been compounded by teaching and research being allocated to different government departments and ministers.

This paper considers whether and why any of this matters. Overall, the UK higher education sector has an outstanding reputation for its teaching and research, and there are substantial benefits in separating out the two activities – not least in allowing for expansion of student numbers and greater focus in regulatory oversight. However, the paper concludes that the growing separation does matter in that it is happening with little or no attention being paid to the downsides and trade-offs in terms of university practices and government policy development.
Six examples are given:

i. Within universities, the lack of clarity about the nature of the relationship contributes to a gap between assertions about the benefits of research-informed teaching, and the actual experience that students may have. This has the potential to mislead students, obscure teaching quality and undermine high-quality teaching that is not research-informed as well as the many examples of meaningful research-informed teaching that exist across the sector.

ii. If the current trajectory towards greater separation continues, fewer students will be able to benefit from exposure to research activity. This is particularly likely to impact on students from disadvantaged backgrounds, with potential consequences for the diversity of the postgraduate cohort and the subsequent composition of the academic workforce.

iii. Separation of functions may also negatively impact on academic staff, in terms of career progression and academic identity, with implications for their role as academics, as well as equality implications, given that women disproportionately undertake teaching roles.

iv. The lack of transparency about the relationship between teaching and research, and of shared understanding between sector and government, risk undermining coherence and effectiveness in policy development and implementation. For instance government objectives in relation to teaching quality may be undermined by institutional focus on research. The same issue could impact on other policy areas such as the size and shape of the sector, funding strategy, institutional cross-subsidies, civic
engagement, and articulation between further and higher education. These issues are particularly relevant to current debates about a single tertiary education system that are already taking place in Wales and Scotland.

v. Separation of the two functions may undermine the roles that universities can play in supporting national priorities, industrial strategy and the activities of local and national businesses and other stakeholders, which depend on both skilled graduates and research outcomes. These activities can of course be delivered separately, but fragmented provision may have less impact, make it harder for businesses to engage, and synergies may be missed.

vi. The sector’s national and international reputation is inextricably linked to universities undertaking both teaching and research. Further separation could weaken the reputational dynamic of having both these activities undertaken in the same institutions, but needs to be managed so that considerations of reputation do not undermine the status of teaching, and teaching-focused institutions.

Greater transparency about the relationship would not only benefit students and universities, but would also lead to a better shared understanding between government and the sector, so informing policy development and enabling the negative consequences of separation and alignment to be mitigated and the positives promoted.
Introduction

Teaching and research, either one or the other or usually both, are what universities do. They also of course do much more as well – such as working with industry, community engagement and outreach to schools – but those activities will always be directly or indirectly underpinned by teaching or research.

The relationship between teaching and research has long been contested. In his 1810 paper on the founding of the University of Berlin, Wilhelm von Humboldt argued for their indivisibility (‘At the higher level, the teacher is not there for the sake of the student, both have their justification in the service of scholarship’). By contrast in 1852 Cardinal Newman in *The Idea of the University* maintained that universities were places of teaching and that other institutions were better placed to conduct research (‘to discover and to teach are distinct functions’).

These contrasting perspectives continue to resonate, with differing views about the nature of the relationship being expressed by universities, academics, students and government.

This paper explores these different views from a policy perspective, in the context of UK undergraduate education.
The different perspectives

1. Universities

Every university will adopt a different approach to the relationship between teaching and research. Some institutions are teaching-only, providing courses that have little direct engagement with research activity. Many provide professionally focused courses that look more towards industry and the professions and may involve links into industry research and development. Others receive substantial research grant and formula funding, with their research activities shaping their ethos and identities. All may, or may not, draw on principles of research-informed teaching.

Five examples drawn from a random selection of websites from across the university sector illustrate the ways in which the relationship can be presented to students:

i. ‘Our specific aims are to … enrich teaching and learning by integrating research within the curriculum and embedding knowledge of international economic and societal research and innovation challenges’ (University Alliance university website).

ii. ‘Invest in your future … You’ll experience the very best in teaching and research’ (student-facing section of Russell Group university website).

iii. ‘[Our] research not only helps underpin courses with applied and relevant information, but also encourages our students to learn and think in critical and original ways, seeking questions as well as answers’ (teaching and research university undergraduate prospectus).
iv. ‘A research intensive modern university’ (teaching and research university website).

v. ‘Opportunities … might include… team-based student consultancy projects or research with “real-world” tasks set by industry experts’ (University Alliance university website).

Although all higher education institutions teach, there is substantial variation in how much research is carried out. Of the current 419 providers registered with the Office for Students (OfS) in England, only 126 received quality related (QR) research funding from Research England in 2022/23. Further, of those that did receive QR funding, the amounts awarded varied from a few thousand pounds per institution to over £88 million. Although many institutions – whether they are in receipt of QR or not – receive research funding from other sources, the figures illustrate the substantial variation in the research/teaching mix.

The picture is further fragmented by differences between disciplines and in some universities exposure to research activity may be regarded as irrelevant for a vocationally focused course.

In terms of academic staff, the growth of teaching-only contracts and the relative decline of teaching-and-research contracts, suggest a trend towards the separation of functions. This is reinforced by increasing role-based specialisation and structural divisions between directors or pro vice chancellors for research and education, each often having their own (separate) committees and staff.

Alison Wolf and Andrew Jenkins draw on Higher Education Statistics Agency (HESA) data to note an increase in numbers
of teaching-only staff between 2005/06 and 2018/19 of more than 80 per cent, while numbers of teaching and research staff rose by just 16 per cent over the same period.\(^2\) This trend was particularly marked within research-intensive Russell Group institutions. In seeking to explain these trends, the authors suggest the reasons are connected with a focus on optimising performance in the Research Excellence Framework (REF). However there are other contributing factors as well, not least the financial pressures facing universities requiring greater efficiencies, and the need for dedicated expertise to support an increasingly diverse student population.

Since the publication of this 2021 paper, 2021/22 HESA data show further declines in the proportion of teaching and research contracts and corresponding growth of teaching-only contracts.

As an illustration of how the sector has changed, it is interesting to compare these figures to those set out in the Robbins Committee report from 1963.\(^3\) Table 48 of the report summarises the results of a survey of academics on the balance of teaching and research in their work. Of those surveyed, none reported conducting no research at all, and the lowest percentage of time spent on research among the readers / senior lecturers / lecturers’ group was 23 per cent. Professors recorded 18 per cent of their time on research, 26 per cent on teaching, and the rest on administration and other activities.

In a paper published in 2022, Adam Matthews and Ben Kotzee reviewed the 2017 Teaching Excellence Framework (TEF) and 2014 REF submissions and found that, in relation to the REF impact case studies, the separation of research and teaching activities was presented as a strength (‘active researchers
benefit from reduced teaching loads’).\textsuperscript{4} For the TEF on the other hand, they found that research expertise was invoked ‘to bolster claims of teaching excellence’ and as a mechanism to market the university to students.

Subsequently the 2021 REF guidance was explicit that impact case studies could include the impact of research within the submitting institution and not just beyond it. Nonetheless, analysis conducted by Rand Europe, to be published in 2023, suggests that of the 6,781 impact case studies submitted to the 2021 REF, only nine reference the impact of research on teaching.\textsuperscript{5}

It is important to acknowledge that these sector-level statistics, and the TEF and REF submissions, will not reflect the totality of what is happening within individual institutions: staff on teaching-only contracts may well be carrying out research, and TEF and REF submissions are constructed for distinct and specific purposes. Further, universities may be aligning their teaching and research activities to support their local communities and businesses who need both skilled graduates and research input in a way that is invisible in generic statistics.

Nonetheless, the combination of increasing numbers of teaching-only institutions, research concentration, the growth of teaching-only contracts within institutions and institutional structural divisions between teaching and research activities suggests the overall picture within institutions is considerably more complex than a simple reading of institutional mission statements might suggest.

These disjunctures are not new. The Higher Education
Funding Council for England (HEFCE) commissioned work in 1999/00 which looked into the ways in which universities were approaching the relationship between teaching and research in terms of allocation of resources and strategies. The subsequent report published by Kelly Coate and others found little coherence in institutional approaches, concluding: ‘What seems to be missing is a managerial strategy that promotes the intellectual perception of teaching and research as integrated.’

2. The sector

Sector mission groups and representative bodies have generally responded positively but reactively to the teaching/research relationship, for instance in government consultations. However, the issue has not been a priority for them (in truth just as university teaching itself has not been a priority). Given the diversity of their membership it is unsurprising that their submissions tend to be broadly framed and generic.

The issue arose most explicitly in the context of responses to the Labour Government’s 2003 White Paper *The Future of Higher Education*, which had proposed the withdrawal of research funding from non-research universities. The proposal caused considerable concern within the sector, leading to a forum being established and chaired by Professor Sir Graeme Davies, then Vice-Chancellor of the University of London. The forum concluded that research and teaching were ‘essential and intertwined’ characteristics of a university. They recommended that less research-intensive institutions should be supported to develop a research-informed teaching environment, a proposal that was accepted by HEFCE which then allocated additional funding for a period of three years,
distributed in inverse proportion to existing levels of research funding (though this funding stream was not subsequently extended).

In the 2009 Select Committee investigation *Students and Universities*, the Committee's summaries of the evidence provided by the sector do not suggest that particularly compelling evidence to support the relationship was produced, though Professor Roger Brown, then Vice-Chancellor at Southampton Solent University, is recorded as noting how ‘extraordinary’ it was that the various impacts of research that had been considered were ‘on the economy, on society and on public policy but not student education, yet actually that is the key impact’.8 This argument does not appear to have been expanded further.

The issue arose again during the course of the consultation following the 2015 Green Paper proposing the establishment of the OfS.9 Universities UK in their submission referenced the integrated nature of all university activities, including teaching and research:

*This proposed shift does not sit comfortably with the way universities have succeeded in achieving far-reaching research outcomes that have impact, are internationally recognised for their quality, align with local, national and global priorities, and support research-informed teaching. Teaching and research (along with ‘third steam’ activities, such as innovation and knowledge exchange with business) are indelibly linked within universities and across the higher education system. Creating an absolute administrative and funding separation between teaching and research runs the risk of damaging the interactions*
between these functions within universities to the detriment of both. There is also a danger that broader cross-cutting agendas – which are built on the close integration of a university’s activities, such as supporting and developing high level skills (both at undergraduate and post graduate and doctorate levels) – will become more difficult.¹⁰

Lord Stern’s 2016 independent Review of the REF explored similar issues.¹¹ He noted that many universities argue that their research and teaching activities are intertwined, even ‘jointly produced’. He recommended that the TEF and the REF should be developed in tandem to ensure they do not incentivise universities to separate research and teaching inappropriately. He also recommended that REF case studies should be developed to illustrate how research can be shown to have a major impact on teaching (a point, as noted above, that does not seem to have yet been reflected in sector practice). Referring to the ‘vital relationship between teaching and research’, he concludes that:

Successful institutions do not sharply separate out their teaching and research missions and it is vital that the introduction of the TEF does not result in the reintroduction of a binary divide. … Links between teaching and research are key to the quality of the learning and research environment at the institutional level.

None of these sector submissions advocate for high quality teaching-only activities or institutions.
3. Students

A number of academic papers have investigated students’ perspectives on the relationship between teaching and research.

Overall students report positively: being taught by academics who are active researchers is seen as stimulating and associated with teaching being seen as authoritative and the curriculum up to date.¹² As part of the investigation by Kelly Coate and others, students within eight institutions were surveyed and generally reported positively regarding their research-active lecturers, but with significant subject differences (more positively in the humanities than in the sciences) and more so for postgraduate taught and research students than undergraduate.¹³ The 2009 Select Committee report also records students referencing the vitality of being taught by lecturers who are researchers.¹⁴ But the picture is mixed, and papers describe students reporting negatively on the research activities of their lecturers when their research takes them away from their teaching, or where the curriculum is perceived by students to be distorted by academic research interests.¹⁵

Universities will construct and present their approach to teaching (research-informed or otherwise) according to their own missions and pedagogical priorities. Inevitably in a demand-led system, they will be influenced by students’ priorities. Although some students will want to be exposed to a research-informed teaching environment, others will be more interested in exposure to professional practice that will equip them with the skills needed to follow a particular career, and indeed many will want both. But generally – and probably
for the majority of students – it may be unrealistic to expect them to know in advance what sort of university teaching and pedagogical approach they would most benefit from, and in large part pedagogy is, and should be, taken on trust.\textsuperscript{16}

Research by UCAS indicates that ‘academic reputation’ is the most important consideration that influences student choice as to where to study. The concept of ‘academic reputation’ is broad and can include a reputation for teaching as well as research. But as the extensive research literature looking at student choice indicates, the concept of ‘reputation’ is influenced by the role played by league tables.\textsuperscript{17} Hazelkorn’s \textit{Rankings and the Reshaping of Higher Education} cites research that demonstrates that league table performance has a significant influence on student choice as to where to study, though other papers suggest that league tables only influence and are not determinative.\textsuperscript{18} The influence appears to be particularly relevant for international students.

The challenge with the global league tables is that the majority of their metrics depend on research citations and measures of research reputation that may have no bearing at all on teaching, let alone teaching quality. Indeed this was cited as one of the reasons in the 2015 Green Paper for introducing the TEF: ‘A university’s reputation is important for students but most league tables do not include a measure of teaching quality’. Hazelkorn suggests including the percentage of highly-cited, award-winning or senior academics who teach undergraduate classes as a metric to illustrate the impact of research on teaching in order to ensure the tables have more relevance to students, but that proposal has not been taken up by league table compilers.
It would be a mistake to overstate the impact of league tables: there exist many other more objective measures of teaching quality that inform student choice – particularly those promoted by UCAS, but also the OfS’s DiscoverUni, the National Student Survey, the HEPI / Advance HE Student Academic Experience Survey and many other sources. Nonetheless, league tables remain powerful influencers, not least because they purport to offer such an enticingly simple measure of quality. Their influence is evidenced by the priority accorded by universities to promoting their league table performance. Further, students’ choices about where to study are heavily influenced by perceptions of likely graduate outcomes, and research suggests that employers may be influenced by league table performance when recruiting graduates.19

Given the importance of student choice in driving institutional financial sustainability, it is almost inevitable that there will be a correlation between students’ interest in academic reputation and marketing material promoting universities’ credentials in relation to research – exactly the point made by Adam Matthews and Ben Kotzée. The blurring of substance and reputation makes the relationship between teaching and research even more opaque.

4. Academic research

There is a large body of UK and international academic literature, dating back to at least the 1960s, looking at the relationship between teaching and research, largely from the perspective of pedagogical and disciplinary practice.

Many of the early papers looked at whether there was an intrinsic nexus between teaching and research. This focus
shifted, not least as the separation of the two activities became an inevitable reality following the expansion of student numbers and increasing research concentration in the 1970s and 80s. In 1992, Paul Ramsden and Ingrid Moses concluded that there was no necessary correlation between good teaching and good research, and this was followed by the seminal analysis by John Hattie and Herbert Marsh in 1996 which reviewed 58 existing research analyses from higher education sectors across the world. Their study noted potential negative correlations between teaching and research (scarcity of time and energy to do both teaching and research, different attributes required for each, and divergent reward systems) as well as potential positive correlations (common abilities, and ‘conventional wisdom’ that the functions are mutually enriching), concluding that overall the correlation was close to zero. The report quoted Webster as saying ‘It may be that we continue to believe that research enhances teaching, in the face of evidence that it does not, so we can continue to spend time doing it’, and it argued that the debate should move on from a focus on the nature of the relationship to how the relationship could be maximized.

Many subsequent papers have investigated ways of maximising the relationship, primarily looking at how research can benefit teaching and students. There is little evidence of teaching directly benefiting research outputs and outcomes, although there are fleeting references in some older research studies (for instance Kelly Coate and others reference examples of teaching in some disciplines stimulating new thinking and encouraging the clear articulation of complex research arguments).
Disciplinary differences are apparent in the analyses. Particularly in science subjects, current research may be so far ahead of any undergraduate curriculum as to make the connections difficult, with, for instance, the link being stronger in English than in Physics.\textsuperscript{24} Stefan Collini reflects in \textit{English Pasts} that the humanities are essentially ‘conversational’ subjects ‘which is one reason why the close connection with teaching [and research] is not simply a historical contingency’.\textsuperscript{25} Other papers have considered the impact of different institutional settings, with Lewis Elton suggesting it is more a question of there being a positive correlation under particular conditions.\textsuperscript{26}

Some analyses have focused on the variety of practices within their own institutions to explore and extend examples of good practice.\textsuperscript{27} The British Academy considered the different ways in which the relationship was implemented in the humanities and social sciences.\textsuperscript{28}

One of the complexities inherent in these papers is the breadth of different types of activities that fall under the generic heading of ‘research-informed teaching’, to use that expression as an umbrella term. Alan Jenkins and Mick Healey have considered this issue extensively in their work, and in 2005 proposed four categories of relationship:

\textbf{i. Research-led:} where the curriculum is structured around the specialist research interests of teaching staff.

\textbf{ii. Research-orientated:} where the curriculum emphasizes how knowledge is produced, and involves the teaching of inquiry skills and the acquisition of a research ethos.

\textbf{iii. Research-based:} where the curriculum is largely designed around inquiry-based activities.
iv. Research-informed: where teaching draws on systematic inquiry into the teaching and learning process itself.\textsuperscript{29} 

Not all these categories require the teaching and research to be carried out by the same person, nor – with the exception of the first category – even within the same department or institution. For instance, many papers address the third category, inquiry-based activities, citing compelling evidence of the positive impact of students being active learners in their own research activities as opposed to passive recipients of knowledge. However, inquiry-based teaching is not the preserve of higher education. As noted by Tony Harland:

\textit{It is not necessary for research done in an institution on a certain subject for that subject to be taught there, and as long as someone is doing it, in or outside the academy, university teaching can be research-led.}\textsuperscript{30}

It may be that, depending on the circumstances, research-informed teaching in all four categories is more authentic and authoritative if carried out by active researchers, but that is a question of degree and quality rather than anything intrinsic to the definitions of the categories. The point is that the use of the expression ‘research-informed teaching’ has a pedagogical framing that is entirely different to the activity-based framing that is relevant for policy and funding purposes.

Notwithstanding these complexities, papers do identify the following potential benefits of the relationship for students:

- Students can be inspired by being taught by active researchers (as described in the section above), and academics with experience of carrying out research may be more authoritative in teaching research methodology and
inculcating a research mindset (Lewis Elton’s ‘learning in a research mode’).\textsuperscript{31}

- Teaching by active researchers may be more at the edge of cutting-edge research. A version of this point was expressed by Barbara Zamorski (drawing on the work of Ronald Barnett) in terms of those academics who are active researchers being more likely to teach ‘doubt’ in an age of super-complexity.\textsuperscript{32} Zamorski quotes a lecturer saying ‘Research and critical thinking must have a relationship. It’s what brings us to have some kind of knowledge and wisdom – so at the end it is not belief but doubt that we teach and they learn’ and ‘the curriculum shouldn’t be fixed … so I will include some things I’m currently working on, so as to let them see that knowledge isn’t fixed’.

- Research-informed teaching can have a positive impact on graduate outcomes, particularly for under-represented groups – for instance, Mick Healey and others refer to enhanced employability from being involved in research activities, and this will particularly be the case for students exposed to business-facing research and development activities.\textsuperscript{33} In a particularly compelling analysis, Russel Hathaway and others reported on a survey of 291 students in a large US research institution and found that participation in research activity meant that students were ‘significantly more likely’ to pursue postgraduate education, compared to a comparable control group.\textsuperscript{34} The programme was constructed to encourage postgraduate participation by students from black, female and under-represented backgrounds and involved structured support for the research. Significantly, the paper found that participation
in research programmes had a positive impact for students with a range of incoming abilities, and in all undergraduate years. The study is compelling in its conclusions, though it leaves open the question as to whether the positive outcomes were due to the exposure to research activity as opposed to the enhanced engagement inherent in the programme.

- Exposure to research can encourage students to consider research careers.35 Roger Lindsay and others quote a Master’s student saying: ‘If you are setting people on the road to research then it’s … quite obvious, that if the lecturer isn’t involved in research themselves, then how can they do this?’36

- Development of a shared sense of community of knowledge and generation of a sense of belonging. In 1998, the Boyer Commission in the United States advocated the importance of students forming part of a scholarly community, with teaching informed by scholarship.37 This point is reinforced by Brew and others, for instance: ‘an increasing number of scholars think first years should experience inquiry-based research to promote deep learning and a sense of belonging within a community of scholars.’38

- Regardless of teaching, studying in a research environment may in itself be stimulating and valuable: Graham Gibbs’s *Dimensions of Quality* categorises this as a ‘presage variable’: the benefit may not be directly attributable to teaching but the fact of exposure to a research environment can, depending on the student, add substantial value.39
• Some studies also reference the practical point that students in the sciences in particular can access sophisticated research facilities if they are studying in a research environment.

5. The academic workforce

Separate to the issue of the impact of research on teaching are questions of academic identity and the importance for many academics of undertaking research as well as teaching.\(^{40}\) Research papers document the differences in salaries, promotions and careers between teaching and research staff, with clearer promotion and reward structures for research staff, though this pattern may now be slowly changing given increasing institutional emphasis on equitable reward structures and routes to promotion through teaching. Nonetheless, issues of prestige and recognition remain, with the vocabulary of ‘buying out’ teaching as a way of focusing on research being commonly invoked, reinforcing the sense of hierarchy. Sara Brownell and Kimberly Tanner note that doctoral training, the route for many graduates into academic careers, is more or less entirely structured around research not teaching.\(^{41}\) Their paper also notes that many academics come into the profession in order to carry out research as well as teaching, and value the research elements of their role in terms of their own sense of identity.

Lewis Elton points out there are practical reasons for keeping teaching and research together within institutions: many academics will be good at both teaching and research and if the two are separated, one or other of those functions will lose a good academic.\(^{42}\)
There are also equality implications from the increase in use of teaching-only contracts. Teaching-only contracts are carried out disproportionately by female staff, suggesting that further splitting off teaching from research could exacerbate that disproportion.43

6. Government

Governments’ perspectives on the relationship between teaching and research differ markedly in both substance and style to those of the sector. Political responses have evolved over the decades, but there has been a consistency in the trajectory, regardless of political affiliation.

In the first part of the twentieth century, governments were little interested in universities. The sector was still relatively small: prior to the second world war, some 50,000 students in the UK, 1.7% of the age group, studied full time in 16 universities (or 24 if one includes the Universities of London and Wales constituent colleges). Universities were funded directly by the Treasury to do both teaching and research, and were largely left to their own devices as to how to do this. The relationship between research and teaching was assumed.

By the time of the Robbins report in 1963, student numbers had more than doubled, with 118,400 students in higher education, representing 8.5% of the age group, and with numbers projected to rise requiring substantial government investment.\textsuperscript{44}

In advocating for a substantial expansion of the sector, Robbins nonetheless drew on Humboldt’s principles to make the case for the alignment of teaching and research:
Most discussion of this subject clouds the issue by setting teaching and research over against each other as antithetical and supposing an opposition that exists only at extreme points, as if teaching were nothing but patient recapitulation and explanation of the known and all research were a solitary voyage to discover something that will be intelligible to a mere handful of persons. There is no borderline between teaching and research; they are complementary and overlapping activities.

The Conservative Government’s initial response to the Robbins’ report was terse, not least because of an imminent general election. While accepting the case for increased student numbers and the elevation of some institutions to university status, there is no comment on the stated purposes of higher education as involving both teaching and research: ‘Many of the detailed proposals are primarily a matter for the academic world.’

Following the election, the implementation of the report fell to the new Labour government. However, their priority was the white heat of technology, with the Secretary of State for Education and Science, Anthony Crosland, using his 1965 Woolwich speech to focus on the vocational education to be provided by the new polytechnics. Endorsing the role of vocational and professional education as enabling students to acquire the professional skills they would need in their careers, he drew a contrast with university education which he characterised as ‘learning for its own sake’. There is no reference to research in this speech.

With hindsight, the Conservative Government’s initial response to the Robbins report proposals and Labour’s
Woolwich speech set the pattern for subsequent government policy, from both Labour and Conservative, on the question of the relationship between teaching and research. On the one hand the relationship between teaching and research was regarded as a matter for universities to determine; and on the other there were more pressing social and economic drivers which determined government policy. These drivers particularly included the need to expand and fund student places, such that if their implementation had as a consequence the weakening of the relationship, then that would be a price worth paying. Also implicit in Crosland’s speech was a view that university learning for its own sake is something of a privileged and elitist activity that distracts from the more urgent social and economic pressures of expanding places for a broader demographic of students, a view no doubt reinforced by the socio-economic background of those attending university at the time.

In the 1970s and 1980s, a third element emerged that led to further separation of teaching and research: growing political interest in accountability for public funding and quality of both teaching and research, with a far more interventionist approach to each area of activity. The Conservative Government’s 1987 White Paper dealt separately with teaching and research, though interestingly continued to adopt Robbins’ Humboldtian-influenced definition of the aims and purposes of higher education. Nonetheless, concern was expressed about quality and lack of accountability for teaching, and its proposals included ‘improvements in the design and content of courses … better teaching through staff training, development and appraisal, more selectively funded research …’ Not only is there no explicit reference to any relationship
between teaching and research, but the implication is that the relationship obscures proper accountability. Humboldt’s noble aspiration of both professor and student having their justification in the common endeavour of scholarship by implication translates into producer power trumping the interests of the student as consumer.\textsuperscript{48}

In parallel to this emphasis on separate accountability, the 1970s and 80s also witnessed a consistent political drive to concentrate research funding. With fewer universities funded to carry out research and increasing student numbers, the practice of exposing all students to research activity became a practical impossibility. This point is made in the subsequent 1991 White Paper \textit{Higher Education: a New Framework}, which laid the ground for the Further and Higher Education Act (1992) that enabled polytechnics to acquire university title.\textsuperscript{49} As part of this, the 1991 White Paper proposed the ending of the ‘Student Resource Funding’ allocation that had previously provided an element of research funding to all universities according to student numbers.

By the late 1990s, higher education policy had become largely devolved throughout the UK, so when the question of the relationship between teaching and research resurfaced in the Labour Party’s 2003 White Paper \textit{The Future of Higher Education}, the focus was primarily on England.\textsuperscript{50} Alongside tuition fees, the White Paper proposed increasing research concentration to ‘our leading research departments’ while explicitly encouraging other universities to abandon their research activities to focus on different models of teaching. The paper also repeated previous scepticism about the relationship between teaching and research (‘We believe that the time has come to look carefully at the relationship between research
and teaching’) making the point that teaching needed to be separated out from research to ensure it achieved proper recognition, and – in words that in many ways anticipate the Conservatives’ introduction of the TEF – to ensure that student choices were not distorted by research reputation:

_We are also determined to promote other sources of recognition, achievement and prestige besides eminence in research, both within and between institutions, as set out elsewhere in this paper … Neither students nor employers should have to base their decisions on perceptions of relative prestige which may be outdated or unreliable, but should be able to draw on up to date and robust assessments of the quality of learning and teaching._

The same issues were revisited in the 2009 Select Committee review. However, after taking extensive evidence, the Committee ended up ducking the issue of the relationship between teaching and research, and instead recommended that ‘the government commission and publish independent research in this area to inform future policy decisions’ (paragraph 172). The Government’s response to this proposal was dismissive: work had already been carried out, research studies had shown that the links between the two were not automatic, and ‘the government does not consider there would be added value in its commissioning further, specific independent research on this subject at this stage.’

The objectives of the June 2011 Coalition Government White Paper, _Students at the Heart of the System_, were again dominated by proposals to reform student funding, but with concerns expressed about the subordination of teaching
to research (‘We want there to be a renewed focus on high-quality teaching in universities so it has the same prestige as research’).

The solutions are presented in terms of better student choice operating in a competitive market, the introduction of student charters, and a move to make HEFCE more of a champion for students as consumers. Following the 2015 General Election, the Conservative party went a step further, fulfilling a manifesto pledge for direct government intervention to improve teaching quality. Its 2015 Green Paper *Fulfilling our Potential* created the TEF and the OfS as the independent regulator for students in England, ensuring direct and unmediated institutional accountability for teaching quality. The TEF is proposed as a mechanism to address market failure by aiming to:

*build a culture where it is recognised that teaching has equal status with the research within and across HE institutions … Research and teaching should be recognized as mutually reinforcing activities … While excellent research can – and should – be a complementary activity, there is a concern that too often the incentive at an institutional and individual level skews activity away from teaching.*

The architecture for these proposals was then elaborated in the 2016 White Paper, *Success as a Knowledge Economy* where the relationship between the proposed OfS and UK Research & Innovation (UKRI) was addressed in these terms:

*We will act to ensure teaching and research remain coherent and coordinated at the national as well as the institutional level …*
Close joint working between the OfS and UKRI will ensure that at the national level there continues to be a strategic approach to the allocation of funding to HE institutions. … The new arrangements will recognise and reward those institutions that already use research skills explicitly to enhance their teaching, while encouraging more institutions to ensure their teaching is informed by the latest in scholarship, research and professional practice. Overall this will enhance teaching and the undergraduate experience and through the qualitative assessment in TEF we will look to reflect the value of research led teaching alongside other relevant factors.

Legislation then followed in the form of HERA. However, teaching and research are dealt with in separate parts of the Act, and the statutory requirements for cooperation between the OfS and UKRI are expressed in permissive and transactional terms. Funding, accountability, governance and strategy are entirely separated.

Structural and policy divergence then reached its culmination with the allocation of responsibility for each of teaching and research to separate government departments in 2016, initially with one minister for higher education straddling both departments as a way of ensuring some degree of coordination, but then with separate ministers from February 2020.

The effect of these developments, from the official response to Robbins onwards, has been to separate teaching and research within universities, either directly through the separation of funding and regulatory oversight, or indirectly as a result of policies such as the expansion of student numbers and
research concentration. This separation has been compounded by the split in ministerial and departmental responsibilities for teaching and research. Political assurances about strategic alignment between teaching and research have not translated into practice.
Discussion: does any of this matter?

These different perspectives on the relationship between teaching and research may raise interesting questions, but does any of this matter? In a complex and diverse sector serving many different purposes, is it not inevitable that there will be varying narratives with disjunctures in between?

At one level, it does not matter. The UK has an impressively strong and successful system of higher education with high quality teaching and research. The sector’s diversity enables autonomous institutions to develop their own distinctive strengths, allowing students to choose from a rich variety of courses whether professionally focused, research-informed or both. Separate regulatory and funding arrangements of teaching and research protect and secure the quality of each.

But at another level, it does matter – not in the sense of wanting to turn the clock back on the expansion of student numbers, research concentration or separate accountability for teaching and research – but in terms of a proper understanding the consequences of separation, both positive and negative.

Six examples serve to illustrate these points:

1. The ways individual universities align their teaching and research for the benefit of students is not always made clear, and there may be a gap between how the relationship is presented externally and the experience students receive – for the avoidance of doubt, it is not being suggested here that the examples taken from institutional websites at the beginning of this paper fall into this category! Broadly-framed assertions designed for marketing purposes
implicitly reinforce the hierarchy of research over teaching, and can end up creating their own mythologies, reinforced by league table distortions. This dynamic can conceal poor quality teaching, undermine high-quality teaching that is not research-informed, and distract from the legitimacy of the many examples of meaningful research-informed teaching that do exist across the sector.

2. If the current trajectory towards greater separation continues, it is not entirely fanciful to imagine a future where most teaching and research are carried out separately. If this happens, the benefits of research-informed teaching identified in this paper will be unavailable for many students (and for many academic staff too). It is likely that there will be socioeconomic imbalances between those students who continue to seek out and secure the residual research-informed teaching and those who do not, which will have implications for the students themselves as well as wider societal consequences in terms of social mobility. It may also potentially limit pathways into postgraduate academic careers with implications for the diversity and dynamism of the future academic workforce.

3. Separation of functions will also have a substantial impact on the careers of academic staff. If staff are required to choose between teaching and research careers, either teaching or research would end up losing some potentially outstanding teachers or researchers. For as long as teaching has lesser status than research within universities, separation will also impact on career progression and academic identity, with associated equality implications - particularly for female academics who disproportionately undertake teaching roles.
4. The lack of transparency about the relationship between teaching and research within the sector, and the lack of shared understanding between sector and government, risk undermining coherence and effectiveness in policy development and implementation. For instance government objectives in relation to teaching quality may be undermined by the priority accorded by institutions to research activity, notwithstanding constraints on government research funding. This lack of transparency and shared understanding risk impacting on other areas of policy development such as the size and shape of the sector, funding strategy, institutional cross-subsidies, civic engagement, and articulation between further and higher education. These issues are particularly relevant to current debates about potential alignment of further and higher education that are already taking place in Wales and Scotland: a shift towards a single tertiary model would inevitably require consideration of the appropriate allocation and funding of teaching and research activities between institutions. The risk to coherence is further undermined, in England, by the separation of teaching and research between different government departments and ministers.

5. Growing separation of functions may also have implications in relation to the broader role that universities play in supporting local, national and regional stakeholders and economies. Civic and cultural engagement often depends on both activities. Local, regional and national businesses need both research investment and highly skilled graduates (as well as further education skills too). Emerging technologies such as quantum technology, artificial intelligence,
semiconductors and so on, rely on research as well as highly skilled graduates. These elements can be delivered separately by different organisations, but in practice are less likely to be able to be strategic and coherent. A contrast can be drawn here with the approach adopted by other countries, not least Scotland, Wales and Northern Ireland, but also further afield. In the United States the National Science Foundation that distributes some $8.8 billion annually, specifically requires as a condition of research grant that consideration be given to the necessary workforce development that will be required to implement the research outcomes. Although it is open to debate how much that strategy impacts on practice, it at least enables coordination and strategic alignment in a way that is more difficult in England.

6. Reputational issues are relevant. The majority of universities in the UK carry out both teaching and research. They are ‘defining features of higher education’ (in the words of the 1997 Dearing report). For many institutions the two are inextricably linked in terms of universities’ ethos, the work their staff undertake, the cross-subsidy of international student fees into research activity (for better or worse), and their individual and collective reputations. The UK’s higher education reputation is premised on its strengths in both teaching and research, and it would be naïve not to acknowledge the tremendous externally focused reputational dynamic generated by having both activities undertaken in the same institutions. This should not be taken for granted. But likewise, it should not obscure the existence of high-quality teaching that is carried out entirely separately from research activity, including in institutions that have little or no research activity.
It is much easier to call for a clearer and evidence-based account of the relationship between teaching and research than it is to deliver it. The diversity of the sector and the variety of perspectives make the exercise harder, particularly against a backdrop of teaching quality already being notoriously difficult to define. Underpinning it all is the power of research prestige which has a distorting influence, obscuring the evidence and a proper focus on teaching. But the fact that the exercise is difficult is not a reason not to do it.

This paper is not in any sense presenting arguments for teaching and research activity to be combined in all universities or in their regulatory oversight – that would be both undesirable and undeliverable. Indeed there is a strong case for more explicitly acknowledging the role of teaching that is independent of research activity. It is an argument for greater transparency about the nature of the relationship in communications with students and other stakeholders. It is also an argument for a more evidence-based discussion within the sector and between the sector and government to enable a better shared understanding of the benefits and disadvantages of separation and alignment, to inform policy development. This would then allow the benefits to be promoted and the disadvantages mitigated, as opposed to the current position where both are largely invisible.
Endnotes


5. Cagla Stevenson, Jonathan Grant, Martin Szomszor, Devika Kapoor, Cecilia Ang, Salil Gunashekar and Susan Guthrie. Data enhancement and analysis of the REF 2021 Impact Case Studies, RAND Corporation [publication pending]


16 For a recent analysis see Andrew Gunn, *Teaching Excellence?: Universities in an age of student consumerism*, 2023, p.75, which speaks of the limitations of student choice: students often do not know what they want and do not necessarily want to be asked what they want; universities should know themselves on the basis of banked knowledge from previous years.


18 For instance, David Roberts with Lisa Thompson, *University League Tables and The impact on student recruitment*, The Knowledge Partnership, 2007

19 There is varying evidence of the extent to which employers are influenced by league table performance. Nonetheless, there is extensive research to suggest that reputation for research is a factor and is perceived as a factor by those advising students – see, for instance, Andrew Jenkins and Alison Wolf, ‘Employers’ Selection Decisions: the Role of Qualifications and Tests’, in Stephen Machin and Anna Vignoles (eds), *What’s the Good of Education?: The Economics of Education in the UK*, 2005, or Jane Hemsley-Brown and Izhar Oplatka, ‘University choice: what do we know, what don’t we know and what do we still need to find out?’, *International Journal of Educational Management*, vol.29, no.3, 2015 https://openresearch.surrey.ac.uk/esploro/outputs/journalArticle/University-Choice-what-do-we-know-what-dont-we-know-and-what-do-we-still-need-to-find-out/99511719302346

20 Paul Ramsden and Ingrid Moses, ‘Association between research and teaching in Australian higher education’, *Higher Education*, vol.23, 1992,
The relationship between teaching and research in UK universities - what is it and does it matter?


21 D Webster, ‘Research productivity and classroom teaching effectiveness’, Instructional Evaluation, vol.9, pp.14-20

22 There are extensive papers considering this issue, for instance: those summarised in Angela Brew, Research and teaching, Beyond the Divide, Palgrave Macmillan, 2006, and Rosanna Breen, Angela Brew, Alan Jenkins and Roger Lindsay, Reshaping Teaching in Higher Education: A Guide to Linking Teaching with Research, 2004; and Dilly Fung, A Connected curriculum for higher education, 2017


25 Stefan Collini, English Pasts, 1999


27 Ian Kinchin and Camille Kandiko Howson, Student perspectives on research-rich teaching, 2013; Vincent CH Tong, Alex Standen and Mina Sotiriou (eds), Shaping higher education with students, 2018


44 The relationship between teaching and research in UK universities - what is it and does it matter?


38 Angela Brew, Research and teaching, Beyond the Divide, Palgrave Macmillan, 2006


46 The relationship between teaching and research in UK universities - what is it and does it matter?


This is a view reinforced by the way in which the relationship has on occasions been articulated. An example is contained in Colin Evans, *English People*, OUP, 1993, which references a letter written by an academic to the *Guardian* published on 29 October 1991: ‘I am employed as a lecturer, and in my naivety I thought that my job was to “know” my field, contribute to it by research, and to lecture on my specialism. Students may attend my lectures but the onus to learn is on them.’


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This Report by Nicola Dandridge considers the different approaches taken by higher education institutions, students, academics and policymakers towards the relationship between teaching and research. It notes how frequently the concept of research-informed teaching is invoked, yet how obscurely it is implemented. The relationship appears to mean different things to different people – and administrations of all political complexions seem unconvinced by its value.

The paper explores the ways in which the relationship between teaching and research can add significant value and have a transformative impact on students. It also notes examples where there is in practice no obvious relationship between the two activities, and where from students’ perspectives there does not need to be.

This HEPI Report finishes by asking whether it matters that the relationship is contested and sometimes opaque, and concludes that it does matter, at least in some respects.